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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,098	08/01/2003	Timothy S. Hostetler	10992845-7	3192

7590 04/29/2005
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
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EXAMINER

NGUYEN, TAI V

ART UNIT PAPER NUMBER

3729

DATE MAILED: 04/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/633,098

Applicant(s)

HOSTETLER, TIMOTHY S.

Examiner

Tai Van Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-35 is/are pending in the application.
- 4a) Of the above claim(s) 27 and 32-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-23 and 28 is/are rejected.
- 7) ☒ Claim(s) 24-26 and 29-31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/730,263.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/05/03.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 19-26, 28-31 and 33-35, drawn to a method of fabricating a fluid ejection device, classified in class 29, subclass 890.1.
- II. Claims 27, 32 and 35, drawn to a fluid ejection device, classified in class 347, subclass 20.

The invention are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product of Group II, can be made material different process, such as coating to form the substrate.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

4. If applicants elect the invention of Group I, a further restriction to one of the following inventions is required under 35 U.S.C. 121.

I-A Claims 19-26 and 28-31, drawn to a method forming a break trench and forming a plurality of small break trench, classified in class 29, subclass 832.

I-B Claims 33-34, drawn to a sawing the wafer to separate individual fluid ejection devices, classified in class 29, subclass 835.

The inventions are distinct, each from the other because of the following reasons:

5. Inventions of Group I-A and Group I-B are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case for example, the invention of Group I-B have separate utility such as sawing. See MPEP § 806.05(d).
6. Because these inventions are distinct for the reasons given above and the search required for Group I-A is not required for Group I-B, restriction for examination purposes as indicated is proper.
7. During a telephone conversation with Larry K. Roberts on 3/2/2005 a provisional election was made with traverse to prosecute the invention of Group I-A, claims 19-26 and 28-31. Affirmation of this election must be made by applicant in replying to this Office action. Claim 33-35 have been withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Specification

8. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
9. The following title is suggested: A METHOD OF FABRICATING A FLUID EJECTION DEVICE.

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Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

10. The abstract of the disclosure is objected to because the abstract is not drawn to the claimed invention. i. e. Method Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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12. Claims 19-22 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Baughman et al (US 5,441,593).

As applied to claims 19 and 20, Baughman et al disclose a method of fabricating a fluid ejection device, comprising: fabricating a thin film (17, Fig. 1) structure on a device substrate (12); forming a peripheral break trench (24) structure in a first surface (26) of the substrate circumscribing a region in which a feed slot is to be formed through the substrate, subsequently abrasively machining the substrate from a second surface of the substrate to the break trench structure to form the feed slot (column 6, lines 59-68).

As applied to claim 21, Baughman et al disclose fabricating the thin film structure includes fabricating the thin film (26, Fig. 1) structure on the first surface of the substrate (12).

As applied to claim 22, Baughman et al disclose forming a break trench structure includes anisotropically etching the trench during a wet etch process (column 6, lines 1-15).

As applied to claim 28, Baughman et al disclose a method of fabricating a fluid ejection device, comprising: fabricating a thin film (26, Fig. 1) structure on a device substrate (12), forming a break trench (24) structure in a first surface of the substrate, the structure comprising a plurality of small break trenches arranged along a slot axis; subsequently abrasively machining the substrate from a second surface of the substrate to the plurality of break trenches to form a plurality of small feed slots through the substrate (column 6, lines 54-68).

Allowable Subject Matter

13. Claims 23-26 and 29-31 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tai Van Nguyen whose telephone number is 571-272-4567. The examiner can normally be reached on M-F (7:30 A.M - 4:30 P.M).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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TN.

April 25, 2005



A. DEXTER TUGBANG
PRIMARY EXAMINER